

## DAFTAR PUSTAKA

- [1] R. W. Sukma and A. Muljatiningrum, *Biogas dari Limbah Ternak*, Cetakan II. Bandung: Nuansa, 2016.
- [2] W. Sasongko, “The production of biogas and biomass from cow faces fix dome biodigester by dilution and adding agitation,” p. 74, 2010.
- [3] T. W. Widodo, A. Asari, N. Ana, R. Elita, B. Besar, and P. Mekanisasi, “SKALA KELOMPOK TANI TERNAK ( Design and Development of Biogas Reactor for Farmer Group Scale ),” vol. IV, no. 1, 2006.
- [4] Alamsyah, A. Amir, and M. N. Faisal, “Peralatan Elektronik Jarak Jauh Berbasis Web,” *Peranc. Dan Penerapan Sist. Kontrol Peralat. Elektron. Jarak Jauh Berbas. Web*, vol. 6, no. 2, pp. 577–584, 2015.
- [5] F. Xia, L. T. Yang, L. Wang, and A. Vinel, “Internet of things,” *Int. J. Commun. Syst.*, vol. 25, no. 9, pp. 1101–1102, 2012, doi: 10.1002/dac.2417.
- [6] W. A. Ahmed, M. Aggour, and F. Bennani, “Smart system for bio digester monitoring,” in *2015 3rd International Renewable and Sustainable Energy Conference (IRSEC)*, Dec. 2015, pp. 1–4, doi: 10.1109/IRSEC.2015.7455118.
- [7] S. UTAMI, P. IRIANI, and Y. SUPRIANTI, “Sistem Monitoring pH dan Volume Biogas Digester Dua Tahap menggunakan Mikrokontroler,” *ELKOMIKA J. Tek. Energi Elektr. Tek. Telekomun. Tek. Elektron.*, vol. 7, no. 1, p. 126, 2019, doi: 10.26760/elkomika.v7i1.126.
- [8] A. H. Abdurrahman, M. R. Kirom, and A. Suhendi, “Biogas Production Volume Measurement and Internet of Things based Monitoring System,” pp. 213–217.
- [9] S. Mirmohamadsadeghi, K. Karimi, M. Tabatabaei, and M. Aghbashlo, “Biogas production from food wastes: A review on recent developments and future perspectives,” *Bioresour. Technol. Reports*, vol. 7, p. 100202, Sep. 2019, doi: 10.1016/j.biteb.2019.100202.
- [10] A. Pertiwiningrum, *INSTALASI BIOGAS*. Yogyakarta: CV. KOLOM CETAK, 2016.

- [11] A. Juanga, “Biogas untuk Masa Depan Pengganti BBM,” *J. Ilm. Indones.*, vol. 4, 2007.
- [12] Kementerian Pekerjaan Umum, “Modul Teknologi Waste to Energy Berbasis Proses Biologis Anaerobic Digester,” *Modul Teknol.*, 2018.
- [13] A. Wahyudi and L. Hendraningsih, *BIOGAS FERMENTASI LIMBAH PETERNAKAN*. UMMPress, 2020.
- [14] Bacaterus.com, “Tutorial Cara Membuat Biogas dari Sampah Organik,” 2020. <https://bacaterus.com/cara-membuat-biogas-dari-sampah-organik/> (accessed Apr. 19, 2021).
- [15] “Rumus Debit Volume Waktu,” 2019. <https://idschool.net/sd/rumus-debit-volume-waktu/> (accessed Apr. 22, 2021).
- [16] R. Chang, *Kimia dasar jilid 2 : Konsep-Konsep Inti*, 3rd ed. Jakarta: Erlangga, 2005.
- [17] T. M. Putri, “Pengukuran Tekanan dengan Bourdon, Diafragma dan Bellows,” 2019.
- [18] Y. Kanda, “Piezoresistance effect of silicon,” *Sensors Actuators A Phys.*, vol. 24, no. 2, pp. 83–91, [Online]. Available: [https://doi.org/10.1016/0924-4247\(91\)85017-I](https://doi.org/10.1016/0924-4247(91)85017-I).
- [19] B. J. Kane, M. R. Cutkosky, and G. T. A. Kovacs, “A traction stress sensor array for use in high-resolution robotic tactile imaging,” *J. Microelectromechanical Syst.*, vol. 9, no. 4, pp. 425–434, Dec. 2000, doi: 10.1109/84.896763.
- [20] F. Fernandus, M. R. Kirom, and I. Chandra, “RANCANG BANGUN ALAT UKUR VOLUME GAS BERBASIS PIEZORESISTIF DESIGN And IMPLEMENTATION VOLUMETRIC GAS METER BASED On,” no. mL.
- [21] G. J. Duffy, “Thermal Mass Flow Measurement,” Dublin City University, 2000.
- [22] S. Yurish, *Advances in Sensors: Reviews, Vol. 7: Physical and Chemical Sensors: Design, Applications \& Networks.*, vol. 7, no. December 2019. 2019.
- [23] B. S. M, “Pengembangan Perangkat Pelatihan Pembangkit Sinusidoal

- Metode PWM dan Moduasi 8-PSK berbasis Mikrokontroller ATMEGA16  
MOde Ideal (1 sinus untuk 3-bit)," pp. 9–47, 2019.
- [24] T. Hirzel, "PWM," *Arduino.CC*, 2018.  
<https://www.arduino.cc/en/Tutorial/Foundations/PWM>.
- [25] M. Z. Asy'ari, "Bagaimana Membuat IoT dashboard." <https://auftechnique.com/bagaimana-membuat-iot-dashboard/>.
- [26] A. Zanella, N. Bui, A. Castellani, L. Vangelista, and M. Zorzi, "Internet of Things for Smart Cities," *IEEE Internet Things J.*, vol. 1, no. 1, pp. 22–32, Feb. 2014, doi: 10.1109/JIOT.2014.2306328.
- [27] S. N. Hida, A. Suhendi, M. R. Kirom, F. T. Elektro, and U. Telkom, "RANCANG BANGUN SISTEM MONITORING VOLUME PRODUKSI BIOGAS DAN KONTROL TEKANAN PADA DIGESTER BERBASIS INTERNET OF THINGS DESIGN AND DEVELOPMENT OF BIOGAS PRODUCTION VOLUME MEASUREMENT AND DIGESTER PRESSURE CONTROL USING INTERNET OF," vol. M.
- [28] R. Rahmawan, "Sistem Kontrol Produk Gas Metana pada Digester Tipe Fixed Dome," *student J.*, no. August, 2013.
- [29] MPXV5100, "MPX5100, 0 to 100 kPa Differential, Gauge, and Absolute Integrated Pressure Sensors," *NXP Semicond.*, pp. 1–19, 2018, [Online]. Available: <https://tinyurl.com/y2rcfk8h>.
- [30] A. Sensors, "CFA100 A,B," vol. 5, p. 100.
- [31] D. S. Graha, R. Fathoni, A. Hasad, and A. H. Paronda, "SISTEM PROTEKSI KEBOCORAN KRAN DAN PENCATATAN METERAN AIR DIGITAL PADA PDAM BERBASIS MIKROKONTROLLER ARDUINO UNO R3," *JREC (Journal Electr. Electron.)*, vol. 5, 2017.
- [32] B. Hejrati and F. Najafi, "Accurate pressure control of a pneumatic actuator with a novel pulse width modulation-sliding mode controller using a fast switching On/Off valve," *Proc. Inst. Mech. Eng. Part I J. Syst. Control Eng.*, vol. 227, no. 2, pp. 230–242, 2013, doi: 10.1177/0959651812459303.
- [33] SIM.Com, "SIM900 Hardware Design," vol. 2.
- [34] Maxim Integrated, "DS 3231 RTC General Description," *Data Sheet*, p. 20, 2015, [Online]. Available:

- <https://datasheets.maximintegrated.com/en/ds/DS3231.pdf>.
- [35] QIU, *Specifications of LCD Module*. Xiamen Amotec Display Co., LTD, 2008.
- [36] I. K. D. Saputra, K. M. Ramdlan, and A. Suhendi, “Pengaruh penambahan EM4 pada substrat nasi basi terhadap potensi produksi gas metana pada reaktor biogas sederhana,” *e-Proceeding Eng.*, vol. 8, no. 1, pp. 389–397, 2021.
- [37] F. R. Silmi, “ANALISIS PENGARUH PENGONTROLAN TEKANAN TERHADAP PRODUKSI GAS HIDROGEN PADA REAKTOR TEMPERATURE PHASED ANAEROBIC DIGESTER (TPAD) FASE ASIDOGENESIS,” 2017, [Online]. Available: <https://openlibrary.telkomuniversity.ac.id/pustaka/123270/analisis-pengaruh-pengontrolan-tekanan-terhadap-produksi-gas-hidrogen-pada-reaktor-temperature-phased-anaerobic-digester-tpad-fase-asidogenesis.html>.
- [38] K. D. Kurniasari, K. M. Ramdlan, and S. Asep, “Pengaruh variasi waktu pengisian pada reaktor anaerobik mesofilik semi kontinyu penghasil biohidrogen,” *e-Proceeding Eng.*, vol. 4, no. 1, pp. 778–785, 2017.